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EXAMINER

PHUONG, DAI

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

|                              |                                      |                                     |  |
|------------------------------|--------------------------------------|-------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/715,471 | <b>Applicant(s)</b><br>KACHI, SEIJI |  |
|                              | <b>Examiner</b><br>DAI A. PHUONG     | <b>Art Unit</b><br>2617             |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-19 is/are rejected.
- 7) ☒ Claim(s) 4-6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/25/2008 has been entered.

### ***Response to Amendment***

2. Applicant's arguments, filed 08/22/2008, with respect to claims have been considered but are moot in view of the new ground(s) of rejection. Claims 1-19 are still pending.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 8-9, 11-15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lor et al. (Pub. No.: 20040068668) in view of Margon (Pub. No.: 20030214933).

Regarding claim 1, Lor et al. disclose a method of limiting communication access between wireless LAN terminals 120-129 of a wireless LAN 111-115 (Fig. 1 and paragraph 144. Lor et al. disclose an AP also passes client status (identity, MAC address, etc.) to WLAN Switch

and the WLAN Switch enable **additional access control for client**, e.g. subnet, time duration, location, QoS, etc), comprising:

allocating different IP subnet to a wireless LAN terminal when the wireless LAN terminal move to another AP zone ([0088]).

setting default gateways of the respective wireless LAN terminals as a single access limiter (fig. 1 and [0031]. Lor et al. disclose the Access Points, 111-115, are connected to the LAN via switches, 106 and 107. **These switches, called Wireless LAN Switches**, do not only perform Layer 2 switching, but also act as a wireless edge manager. They provide the additional **functionalities like access control**, firewall functions, traffic privacy and quality of service, network management, and load balancing); and

returning a communication packet between the wireless LAN terminals from said access limiter which is set as said default gateways, for thereby providing an access limiting function to limit communication access between the wireless LAN (fig. 1, [0047] to [0055] and [0144]. Lor et al., paragraph 49, disclose there are several types of access control policy that a WLAN should support, including client identity based, time-based, location-based, and application-based. In addition, Lor et al., paragraph 55, disclose access control policies may be based on application because some applications need more resources than other. For example, peer-to-peer-type file downloading and streaming video especially may not be welcome during work hours. Access can be controlled at either the AP or the WLAN switch by inspecting the packet content).

However, Lor et al. do not disclose allocating different subnetwork addresses to respective wireless LAN terminals in a wireless LAN access point.

In an analogous art, Margon discloses allocating different subnetwork addresses to respective wireless LAN terminals in a wireless LAN access point (fig. 5. Margon, paragraph 38 and paragraph 39, discloses the base Station 102 can dynamically communicate with Remote Stations 104 in a number of different addressing. The address of each Remote Station 104 can correspond to the IP address of that Remote Station 104. Another advantage of using the IP protocol as an addressing scheme is the ability to **create zones that correspond to one or more sub-networks of the IP network**. Accordingly, such embodiments of the invention can be configured so that a subset of the Remote Stations 104 exist in one IP sub-network or zone. Furthermore, Margon, paragraph 51 to paragraph 52, discloses the network system 500 comprises a first zone 510, Zone 1; a second zone 520, Zone 2; and a third zone 530, Zone 3. Each zone groups a number of Remote Stations 104 located in a given physical region. The number of remote Stations 104 assigned **ID addresses 1 through 100 are configured in Zone 1 and the number of Remote Stations assigned ID address 101 through 256** are configured in Zone 2. In other words, the base station 102 allocates different subnetwork addresses to each zone and the number of remote stations (wireless LAN terminals) in each zone has different subnetwork addresses.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically allocating different subnetwork addresses to respective wireless LAN terminals in a wireless LAN access point, as taught by Morgan, the motivation being in order to allow the maintenance of a single base station in a spacious geographical area while minimizing the cost of the hardware at the remote station due to their grouping in zones of smaller geographic areas. Increased efficiency is achieved by

moving intelligence to the Remote Stations so that propagation delays to the base station do not reduce system throughput and also maintain the bandwidth is available in the system.

Regarding claim 8, the combination of Lor et al. and Morgan disclose all limitations in claim 1. Further, Lor et al. disclose a method wherein providing the access limiting function to limit communication access between the wireless LAN terminals is done without modifying the existing wireless LAN access point ([0009]).

Regarding claim 9, Lor et al. disclose a wireless LAN system (fig. 1), comprising:

a wireless LAN access point 111-112 configured to wirelessly associate with a plurality of wireless terminals 120-122 ([0031]. Lor et al. disclose the wireless devices typically are located at the edge of the network. The wireless devices, 120-129 are connected to the enterprise network via the Access Points, 111-115, which in turn are the edge devices of the wired LAN); and

an access limiter (WLAN switch, 106 and 107) configured to control communications between a first of the plurality of the wireless terminals and a second of the plurality of the wireless terminals at the wireless LAN access point (fig. 1, [0031]. Lor et al. disclose the wireless devices, 120-129 are connected to the enterprise network via the Access Points 111-115 which communicate and control by the WLAN switch)

wherein the first wireless terminal and the second wireless terminal communicate through the access limiter (fig. 1, [0031]. Lor et al. disclose the wireless devices, 120-129 are connected to the enterprise network via the Access Points, 111-115, which in turn are the edge devices of

the wired LAN. The Access Points, 111-115, are connected to the LAN via switches, 106 and 107. These switches, called Wireless LAN Switches, do not only perform Layer 2 switching, but also act as a wireless edge manager. Therefore, the WLAN switch communicates and controls the wireless devices, 120-129 via the Access Points, 111-115).

However, Lor et al. do not disclose each of the first wireless terminal and the second terminal are allocate different subnetwork addresses.

In an analogous art, Margon discloses each of the first wireless terminal and the second terminal are allocate different subnetwork addresses (fig. 5. Margon, paragraph 38 and paragraph 39, discloses the base Station 102 can dynamically communicate with Remote Stations 104 in a number of different addressing. The address of each Remote Station 104 can correspond to the IP address of that Remote Station 104. Another advantage of using the IP protocol as an addressing scheme is the ability to **create zones that correspond to one or more sub-networks of the IP network**. Accordingly, such embodiments of the invention can be configured so that a subset of the Remote Stations 104 exist in one IP sub-network or zone. Furthermore, Margon, paragraph 51 to paragraph 52, discloses the network system 500 comprises a first zone 510, Zone 1; a second zone 520, Zone 2; and a third zone 530, Zone 3. Each zone groups a number of Remote Stations 104 located in a given physical region. The number of remote Stations 104 assigned **ID addresses 1 through 100 are configured in Zone 1 and the number of Remote Stations assigned ID address 101 through 256** are configured in Zone 2. In other words, the base station 102 allocates different subnetwork addresses to each zone and the number of remote stations (wireless LAN terminals) in each zone has different subnetwork addresses.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically each of the first wireless terminal and the second terminal are allocate different subnetwork addresses, as taught by Morgan, the motivation being in order to allow the maintenance of a single base station in a spacious geographical area while minimizing the cost of the hardware at the remote station due to their grouping in zones of smaller geographic areas. Increased efficiency is achieved by moving intelligence to the Remote Stations so that propagation delays to the base station do not reduce system throughput and also maintain the bandwidth is available in the system.

Regarding claim 11, the combination of Lor et al. and Morgan disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein the access limiter 106 is configured as a default gateway for the plurality of wireless terminals ([0031]).

Regarding claim 12, the combination of Lor et al. and Morgan disclose all limitations in claim 11. Further, Lor et al. disclose a method further comprising a wired terminal configured to associate with the access limiter ([0031]).

Regarding claim 13, the combination of Lor et al. and Morgan disclose all limitations in claim 12. Further, Lor et al. disclose a method wherein the wireless access point receives an address resolution protocol request from the first wireless terminal and transmits the address resolution protocol request to the access limiter and to the second wireless terminal, and wherein the access limiter returns the request and the second wireless terminal drops the request ([0038] to [0077]).



Regarding claim 14 the combination of Lor et al. and Morgan disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein when the first wireless terminal transmits a packet intended for the second wireless terminal to the access limiter, the access limiter detects that the packet is intended for the second wireless terminal and drops the packet ([0055] and [0117] to [0134]).

Regarding claim 15, the combination of Lor et al. and Morgan disclose all limitations in claim 9. Further, Lor et al. disclose a method wherein when the first wireless terminal transmits a packet intended for the second wireless terminal to the access limiter, the access limiter performs priority control over the packet among a plurality of received packets ([0012] and [0121] to [0128]).

Regarding claim 17, Lor et al. disclose a wireless network router (fig. 1), comprising:

A wireless access point 111-115 (fig. 1, [0031])

an access limiter (WLAN 106 and 107) comprising a plurality of Local Address Network (LAN) interfaces associated to the wireless access point (fig. 1 and [0031]), the access limiter comprising:

an access limiting apparatus to pass or drop a received packet to thereby inhibit or permit communications between a plurality of wireless terminals (fig. 1 and [0048] to [0055]); and

a routing apparatus for distributing packets selectively between the wireless LAN access point depending on a destination of the packets between the plurality of wireless terminals (fig. 1 and [0048] to [0055]),

wherein communication between any of the plurality of wireless terminals is routed through the access limiter (fig. 1 and [0048] to [0055]).

However, Lor et al. do not disclose each of the wireless terminals are allocate different subnetwork addresses.

In an analogous art, Margon discloses each of the wireless terminals are allocate different subnetwork addresses (fig. 5. Margon, paragraph 38 and paragraph 39, discloses the base Station 102 can dynamically communicate with Remote Stations 104 in a number of different addressing. The address of each Remote Station 104 can correspond to the IP address of that Remote Station 104. Another advantage of using the IP protocol as an addressing scheme is the ability to **create zones that correspond to one or more sub-networks of the IP network.** Accordingly, such embodiments of the invention can be configured so that a subset of the Remote Stations 104 exist in one IP sub-network or zone. Furthermore, Margon, paragraph 51 to paragraph 52, discloses the network system 500 comprises a first zone 510, Zone 1; a second zone 520, Zone 2; and a third zone 530, Zone 3. Each zone groups a number of Remote Stations 104 located in a given physical region. The number of remote Stations 104 assigned **ID addresses 1 through 100 are configured in Zone 1 and the number of Remote Stations assigned ID address 101 through 256** are configured in Zone 2. In other words, the base station 102 allocates different subnetwork addresses to each zone and the number of remote stations (wireless LAN terminals) in each zone has different subnetwork addresses.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically each of the wireless terminals are allocate different subnetwork addresses, as taught by Morgan, the motivation being

in order to allow the maintenance of a single base station in a spacious geographical area while minimizing the cost of the hardware at the remote station due to their grouping in zones of smaller geographic areas. Increased efficiency is achieved by moving intelligence to the Remote Stations so that propagation delays to the base station do not reduce system throughput and also maintain the bandwidth is available in the system.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3, 7, 10, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lor et al. (Pub. No.: 20040068668) in view of Margon (Pub. No.: 20030214933) and further in view of Whelan et al. (Pub. No.: 20040203593).

Regarding claim 2, the combination of Lor et al. and Morgan disclose all limitations in claim 1. Further, Lor et al. disclose a method wherein said access limiter 106 (see Fig. 1) has two LAN interfaces connected respectively to a wired terminal 101 and the wireless LAN access point 111-112, said wireless LAN terminals 120-122 being connected to said wireless LAN access point 111-112, said access limiter 106 comprising:

an access limiting function for passing or dropping a received packet to thereby inhibit or permit communications between the terminals ([0031] and [0047] to [0055]);

a band limiting function for buffering a received packet to process audio packets with priority over other packets ([0055] and [0121] to [0128]);

a routing function for distributing packets selectively to said wired terminal and said wireless LAN access point depending on a destination of the packets ([0055] and [0124] and table 2 to table 3);

a server for allocating IP addresses having different subnets for the respective terminals in response to address requests from said wired LAN terminals (Fig. 5 and Fig. 7, [0021], , [0027], [0050], [0074] to [0075]); and

an ARP server installed in an existing IP protocol stack ([0077]).

However, Lor et al. do not disclose a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals.

In the same field of endeavor, Whelan et al. disclose a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically including a DHCP server for allocating IP addresses having different subnets for the respective terminals in response to DHCP requests from said wired LAN terminals, as taught by Whelan et al., the

motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 3, the combination of Lor et al. and Morgan and Whelan et al. disclose all limitations in claim 2. Further, Whelan et al. disclose a method wherein when a first one of the wireless LAN terminals is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as a simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has a DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said first wireless LAN terminal to allow said first wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein when a second one of the wireless LAN terminals is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as the simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has the DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said second wireless LAN terminal to allow said second wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein

said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and said access limiter transfers the received packet, which is destined for said second wireless LAN terminal, to said second wireless LAN terminal ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically including a method wherein when a first one of the wireless LAN terminals is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as a simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has a DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said first wireless LAN terminal to allow said first wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein when a second one of the wireless LAN terminals is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; said wireless LAN access point, which operates as the simple bridge between a wireless LAN and a wired LAN, transfers the received DHCP request to the access limiter; said access limiter, which has the DHCP server function, returns a DHCP response to the DHCP request to said wireless LAN access point; and said wireless LAN access point, which has received the DHCP response, converts the DHCP response from wired data to wireless data, sends the DHCP response to said second wireless LAN terminal to allow

said second wireless LAN terminal to make IP communications according to IP address information allocated from the DHCP server; wherein said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and said access limiter transfers the received packet, which is destined for said second wireless LAN terminal, to said second wireless LAN terminal, as taught by Whelan et al., the motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 7, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 10, the combination of Lor et al. and Morgan disclose all limitations in claim 9. However, Lor et al. do not disclose the wireless LAN system further comprising a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol configuration request being a subnet different from subnetwork addresses assigned to the other of each of the plurality of wireless terminals.

In the same field of endeavor, Whelan et al. disclose a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol configuration request being a subnet different from subnetwork addresses assigned to the other of each of the plurality of wireless terminals ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically including a dynamic host configuration protocol configured to return a dynamic host protocol configuration request received from one of the plurality of wireless terminals, the returned dynamic protocol

configuration request being a subnet different from subnetwork addresses assigned to the other of each of the plurality of wireless terminals, as taught by Whelan et al., the motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 16, the combination of Lor et al. and Morgan disclose all limitations in claim 9. However, Lor et al. do not disclose the wireless LAN system further comprising a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point.

In the same field of endeavor, Whelan et al. disclose a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point ([0088] to [0095]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Lor et al. by specifically including a dynamic host protocol configuration server configured to allocate IP address having different subnets for respective wireless terminals that are wirelessly associated with the access point, as taught by Whelan et al., the motivation being in order to allocate IP address to the mobile unit which is associated with an access point.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 3.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 7.



*Allowable Subject Matter*

7. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 4, the prior art record does not disclose nor fairly suggest a method wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal,

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since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to permit communications between the wireless LAN terminals, the access limiter returns the received packet and sends the received packet to said second wireless LAN terminal.

Regarding claim 5, the prior art record does not disclose nor fairly suggest a wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP

request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal, since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to inhibit communications between the wireless LAN terminals, the access limiter drops the received packet.

Regarding claim 6, the prior art record does not disclose nor fairly suggest a wherein when said first wireless LAN terminal is turned on, said first wireless LAN terminal sends a

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DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on a wired LAN, and broadcasts the DHCP request to said second wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said first wireless LAN terminal; and said second wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when said second wireless LAN terminal is turned on, said second wireless LAN terminal sends a DHCP request to the wireless LAN access point for automatically resolving its own IP address; since the DHCP request is a broadcast packet, said wireless LAN access point transfers the DHCP request to said access limiter on the wired LAN, and broadcasts the DHCP request to said first wireless LAN terminal; said access limiter, which has received the DHCP request, sets its own IP address to a predetermined value, and sends IP address information as a response to said second wireless LAN terminal; and said first wireless LAN terminal, which has received the DHCP request, drops the received packet as the DHCP server is not activated; wherein when a packet is to be sent from said first wireless LAN terminal to said second wireless LAN terminal, since a subnet of said first wireless LAN terminal is different from a subnet of said second wireless LAN terminal, before said first wireless LAN terminal sends the packet to said access limiter set as said default gateways, said first wireless LAN terminal sends an ARP request to resolve a MAC address of said default gateways; said wireless LAN access point, which has received said ARP request, transfers the ARP request to said access limiter on the wired LAN and said second wireless LAN terminal; said access limiter which has a same address returns a

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response to said ARP request, and said second wireless LAN terminal which has a different address drops the packet; since said first wireless LAN terminal has had the MAC address resolved by the ARP request, said first wireless LAN terminal sends a packet destined for said second wireless LAN terminal to said access limiter; and if said access limiter is to buffer communications between the wireless LAN terminals, the access limiter performs priority control of the received packet depending on a property thereof.

### **Conclusion**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAI A. PHUONG whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dai A Phuong/

Examiner, Art Unit 2617

Date: 11/04/2008

/Alexander Eisen/

Supervisory Patent Examiner, Art Unit 2617